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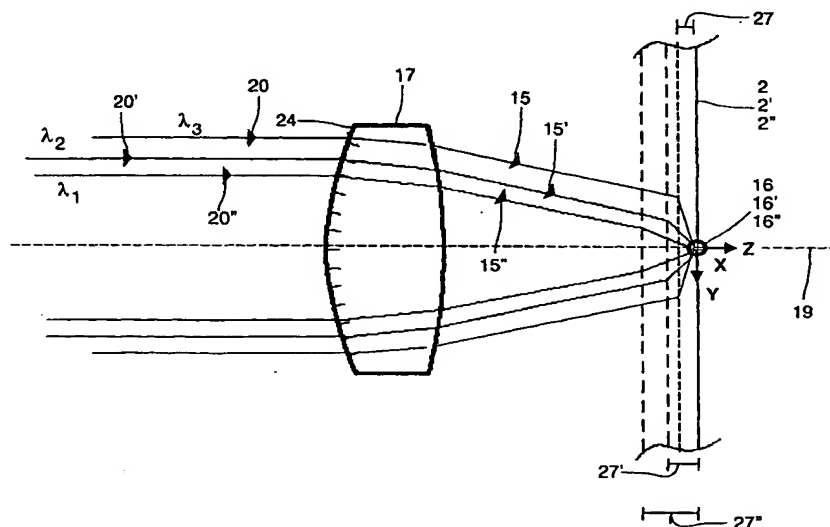
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(54) Title: OPTICAL SCANNING DEVICE



(57) Abstract: An optical scanning device (1) for scanning three information layer (2, 2', 2'') with three respective radiation beams (4, 4', 4'') having three respective wavelengths (λ_1 , λ_2 , λ_3) and polarizations (p_1 , p_2 , p_3). The three wavelengths differ from each other. At least one of the three polarizations differs from the others. The device comprises a diffractive part (24) including a pattern of pattern elements which have one stepped profile for forming three diffracted beams (15, 15', 15'') from the three radiation beams, the part comprising birefringent material, sensitive to the three polarizations. The stepped profile is designed such that the heights (h_i) of the steps of a pattern element introduce phase changes that equal at least two different multiples of 2π for one (λ_1) of the three wavelengths and equal at least two different phase changes modulo 2π for one (λ_2) of the two other wavelengths.

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